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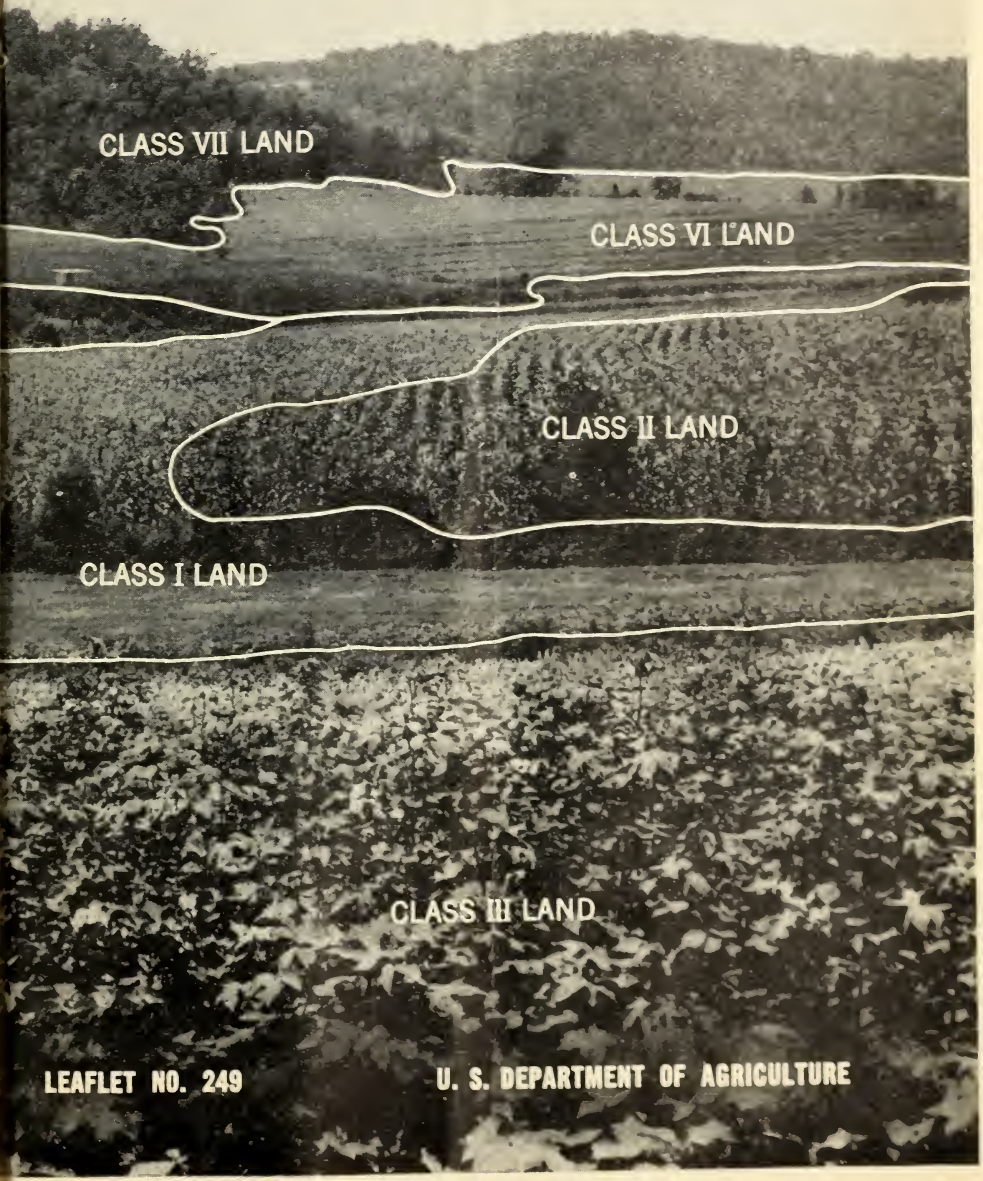
What is a

CONSERVATION FARM PLAN?



LEAFLET NO. 249

U. S. DEPARTMENT OF AGRICULTURE

WHAT IS A CONSERVATION FARM PLAN?

By the *Soil Conservation Service*

IF YOU are a farmer, you know that your farm is different from any other farm. Your land is different from anyone else's land. In fact, the land is not exactly alike on any two fields of your own farm. And, you don't run your farm in exactly the same way as anyone else—you don't have exactly the same tools and equipment—you don't grow exactly the same crops and keep the same kinds and numbers of livestock each year.

In one way, however, you are probably like all other farmers—you continually make plans about how to run your farm. You may keep all your plans in your head or you may put them down on paper; but you do have a plan. You plan what crops to grow each year, which livestock to keep or sell, when and how to remodel the farm buildings or install running water and electricity in them, and hundreds of other details. Also, you probably do a lot of planning about how to increase crop yields and how to protect your land so that it will continue to grow good crops year after year. When you make plans about how to conserve your land for the future while increasing its production now, you are doing conservation farm planning.

More than a half million farmers in the United States now have a written *conservation farm plan*. These farmers got technical help from their soil conservation districts in making these plans. There are over 2,000 soil conservation districts in the Nation. Their main job is to help farmers make conservation farm plans and carry out those plans. Each plan is made especially to fit a certain farm. The farmer who runs the farm and a trained conservationist of the Soil Conservation Service make the plan together. They design it not only to control erosion but also to increase production on the farm.

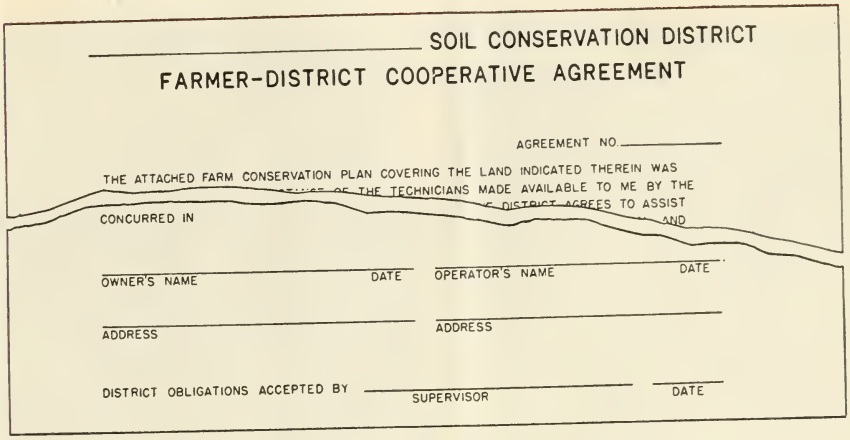
If you live in a soil conservation district and want help on some of your conservation problems, you should go to see the district governing body. The district is governed by a group of your neighbors—they are usually called district supervisors. They will ask you to fill out an application, because the district furnishes help only to farmers who apply for it.

After the district supervisors have approved your application, they will send a soil conservationist to see you. He will help you work out a conservation farm plan. He will have with him a land capability map of your farm, made by a soil scientist. It shows what every acre on your farm should be used for—whether for crops, meadow, pasture, or woods. It also shows how much protection each acre needs. This map is used as the basis for making your conservation farm plan.

The conservationist may first ask you to meet with a group of your neighbors who are also making conservation farm plans. He will explain the land capability maps and you will discuss the general principles of farm planning together.

Then you and the conservationist go over your farm. The two of you discuss the kind of land you have to deal with on each field. You tell the conservationist the kind of farming you want to do—what crops you want to grow and what livestock you want to keep. Together, you decide which fields to use for crops and where the pastures, meadows, and wood lots are to be. You may wish to change some field boundaries so that all land in each field is suited for the same purpose. You may decide to plant trees or grass on some badly eroded land that you have been using for crops. If you are short of cropland, you may decide to plow up some pasture or clear some woods on land suitable for cultivation.

When you have decided what each



_____ SOIL CONSERVATION DISTRICT

FARMER-DISTRICT COOPERATIVE AGREEMENT

AGREEMENT NO. _____

THE ATTACHED FARM CONSERVATION PLAN COVERING THE LAND INDICATED THEREIN WAS [illegible] OF THE TECHNICIANS MADE AVAILABLE TO ME BY THE [illegible] DISTRICT AGREES TO ASSIST AND CONCURRED IN

OWNER'S NAME _____ DATE _____

ADDRESS _____

OPERATOR'S NAME _____ DATE _____

ADDRESS _____

DISTRICT OBLIGATIONS ACCEPTED BY _____ SUPERVISOR _____ DATE

acre is to be used for, you and the conservationist discuss the conservation measures needed on each field. You decide what crop rotations to use and how much fertilizer you will need on each field. You decide which fields to cultivate on the contour and where to strip-crop. You determine whether any fields need to be drained or terraced and where to build ponds and grassed waterways. You decide which pastures need to be fertilized or reseeded and work out a grazing program. You work out how you will manage your wood lots. You may want to give special attention to wildlife areas, such as marshes. And you must also figure out how many livestock your farm will feed under the new system and plan your livestock program to fit your cropping plans.

At this stage of the planning you know just what you want to do. Then you must decide when and how to do it. You plan how you can best build any terraces, dams, or other conservation structures needed and figure out the best time to build them. You decide what kind of grass to plant and when to plant it in your waterways or on your meadow strips or pastures. You figure out the best time to make any needed changes in field boundaries. In fact, you decide just when and how you will go about making all the changes and installing all the conservation measures. You figure about what it will cost you and what you will get out of it. The conservationist can give you many good suggestions. But you must make the final decisions about what you want to do and when you want to do it.

After you and the conservationist have agreed on all the details of the plan, he will have copies of the plan typewritten. The plan will be written in clear, plain language. It will be illustrated with aerial photographs and simple maps. Then you and the conservationist go over the written plan together. You make any changes or corrections that are necessary. When you are satisfied the plan is what you want, it becomes the basis for a cooperative agreement between you and the district. An example of a farm plan, made in this way, is shown on the following pages of this leaflet.

The district, then, will arrange to give you technical help in putting the plan in operation. It may also help you get equipment, planting stock, or other materials you need and don't have on your farm.

Your conservation plan should serve as a blueprint for your farming operations for many years. Since it is written, you do not have to trust your memory. And if changes in markets, prices, or other conditions make it desirable to change the plan, this is fairly easy to do. Any technical aid you need in making the changes you can get through your district supervisors.

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EXAMPLE OF A CONSERVATION FARM PLAN

LAND CAPABILITY

Description of Capability Classes on This Farm

This farm is a dairy farm in Wisconsin. Descriptions of the land classes on this farm follow:

CLASS I.—Very good land that is easy to work and can be cultivated safely with ordinary good farming methods. Soils are deep and productive. The land is nearly level and there is little or no erosion.

CLASS II.—Good land that can be cultivated safely with easily applied practices. Soils are deep and productive but need liming and fertilizing. Gentle slopes need contouring. Bottom land needs improved drainage.

CLASS III.—Moderately good land; can be cultivated safely with intensive treatments. Soils are good; slopes are from 4 to 14 percent. It has moderate to severe erosion and washes easily. Needs contour strip cropping, a rotation with not more than one clean-tilled crop every 5 years, cover crops, and soil-building practices.

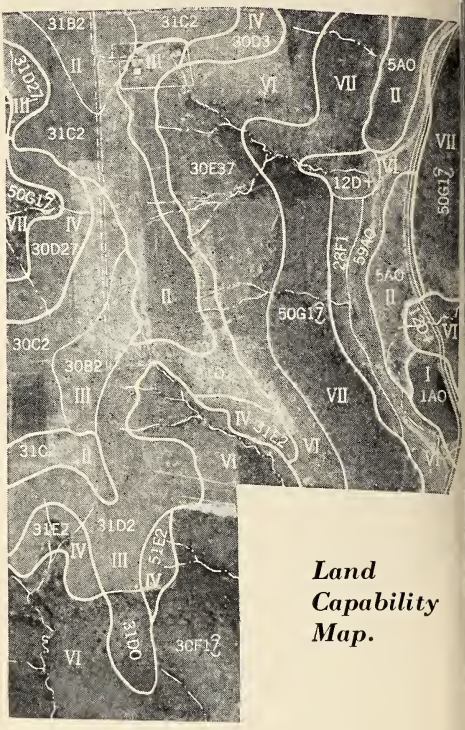
CLASS IV.—Fairly good land that can be cultivated only occasionally. Slopes are 12 to 18 percent and erosion is moderate to severe. It is best suited to pasture or hay and, if cultivated, should be contour strip-cropped and protected with diversion terraces.

CLASS VI.—Land not suited for cultivation; should make good pasture with careful management and improvement through reseeding and fertilizing. It is also suited for trees. It washes easily and has steep slopes that range from 18 to 26 percent.

CLASS VII.—Land not suited for cultivation but suited for grass or trees with very careful management. It has shallow soils that wash easily and steep slopes that range from 26 to 60 percent.

This farm does not have any land that falls in land capability Class V or Class VIII. Class V land is suited for grazing or forestry with slight or no limitations. It is nearly level and usually there is little or no erosion. It is too wet or stony or is otherwise unsuited for cultivation. It needs only ordinary good management to remain productive for grass or trees.

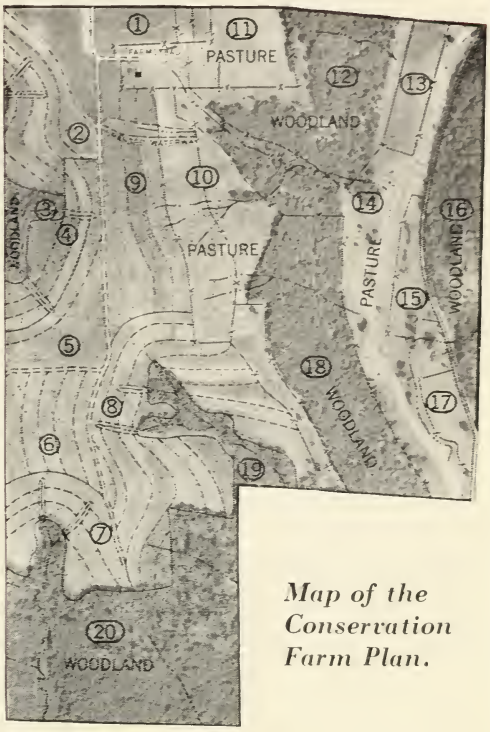
Class VIII land is not suited for cultivation, grazing, or forestry but is suited for wildlife or recreation or for watershed protection. It is usually very steep, rough, stony, sandy, wet, or severely eroded.



Land Capability Map.

The large roman numerals show the capability of each part of the farm. Boundaries of the capability classes are outlined by heavy white lines. The three-part symbol made up of arabic numbers and letters show soil, slope, and degree of erosion.

Land Use Before the Conservation Plan Was Made.



Map of the Conservation Farm Plan.

TABLE 1.—*Conservation measures planned and applied*

Field [1]	Use	Land capability class	Conservation measures
1.....	Crops.....	II.....	Contour tillage; 5-year crop rotation—1 year corn, 2 years small grain, 2 years clover and timothy.
2.....	Crops.....	II, III.....	Contour strip cropping; 5-year rotation—1 year corn, 1 year small grain, 3 years alfalfa and timothy.
4.....	Crops.....	III, IV.....	Contour strip cropping; 5-year rotation—center strip: 1 year corn, 1 year small grain, 3 years alfalfa and timothy; outside strips: 1 year corn, 2 years grain, 2 years timothy and clover.
5.....	Crops.....	III.....	Contour strip cropping; 5-year rotation—1 year corn, 1 year small grain, 3 years alfalfa and timothy.
6.....	Crops.....	II, III.....	Contour strip cropping; 5-year rotation—1 year corn, 2 years small grain, 2 years clover and timothy.
7 and 8..	Crops.....	III, IV, VI...	Contour strip cropping; 5-year rotation—1 year corn, 1 year small grain, 3 years alfalfa and timothy; strip near woods to be permanent hay.

[1] Location of fields shown on the map of the conservation farm plan above.

TABLE 1.—*Conservation measures planned and applied*—Continued

Field [1]	Use	Land capability class	Conservation measures
9.....	Crops.....	II, III.....	Contour strip cropping; 5-year rotation—1 year corn, 1 year small grain, 3 years alfalfa and timothy.
13 and 15.	Crops.....	II.....	Contour tillage and improved drainage; 4-year rotation—2 years corn, 1 year small grain, 1 year pasture.
17.....	Crops.....	I, II.....	Contour tillage; 4-year rotation—2 years corn, 1 year small grain, 1 year pasture.
			Conservation treatments for all cropland: All waterways seeded and maintained in sod. All fields limed and fertilized as needed.
3.....	Woods.....	VII.....	Conservation treatments for all woodland: Protect from fire and grazing. Fence and keep fences repaired. Cut only mature or undesirable trees. Leave shrubs along woodland edge to provide food and cover for wildlife.
12.....	Woods.....	VII.	
16.....	Woods.....	VI, VII.	
18.....	Woods.....	VII.	
19.....	Woods.....	VII.	
20.....	Woods.....	III, VI.	
10.....	Pasture....	III, VI.....	Conservation treatments for all pastures: Lime, fertilize, and seed to grass and clover mixture all worn-out areas. Regulate intensity and time of grazing. Rotate grazing to provide alternate grazing and resting periods of about 2 weeks. Mow weeds and tall grasses at least once each year. Keep livestock off legume pasture during September. Graze newly seeded pasture lightly the first year. Regulate grazing on sweetclover so that it will reseed itself.
11.....	Pasture...	IV, VI.	
14.....	Pasture...	VI, VII.	

[1] Location of fields shown on the map of the conservation farm plan on page 5.

RESULTS OF CONSERVATION FARMING

TABLE 2.—*Changes in land use resulting from conservation plan*

Land use	1938	1946	Change
	Acres	*Acres*	*Acres*
Crops.....	81.6	75.6	−6.0
Pasture.....	39.0	46.1	+7.1
Woods.....	74.0	73.0	−1.0
Other land....	5.4	5.3	−0.1
Total farm..	200.0	200.0	.....

TABLE 3.—*Changes in livestock numbers*

Kind of livestock	1938	1944–46 average	Change
Dairy cows (number)....	18	23	+5
Other cattle (number)....	8	15	+7
Hogs (hundredweight).	45	103	+58
Horses (number).....	4	5	+1
Colts (number).....	1	0	−1

TABLE 4.—*Yields per acre*

Crop	1938	1944–46 average	Change
Corn (bushels).	48	71	+23
Corn silage (tons).....	7	9.6	+2.6
Oats (bushels).	42	56	+14
Hay (tons).....	2	2.2	+0.2
Pasture (pounds digestible nutrients).....	778	1,551	+773

TABLE 5.—*Total feed production in pounds of digestible nutrients*

Crop	1938	1944–46 average	Change
Crops.....	142,000	163,000	+21,000
Pasture.....	30,000	73,000	+43,000
Total.....	172,000	236,000	+64,000

TABLE 6.—*Livestock and livestock products sold*

Product sold	1938	1944–46 average	Change
Cattle (number).....	16	19	+3
Hogs (hundredweight)..	31	96	+65
Butterfat (pounds)....	44	60	+16

The yields per acre from cultivated crops on this farm increased by about 37 percent from 1938 to 1946. The total feed production of the farm, measured in pounds of digestible nutrients, increased by about 38 percent. The amount of livestock and livestock products sold increased by more than 60 percent.

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Some of the increased yield from cropland was probably brought about by improved seed and more favorable weather. But the farmer says he thinks most of it was due to better rotations, more effective use of lime and fertilizer, water conservation, and erosion control. The increased pasture yields were caused mainly by better grazing practices, lime and fertilizer, and reseeding of worn-out areas. The increased livestock production resulted from more and better feed and from more effective planning.

CONSERVATION FARM PLANS POPULAR WITH FARMERS

More than half a million farmers (571,163) in soil conservation districts have completed and are carrying out conservation farm plans (June 30, 1948). All these farmers made their farm plans in much the same way as described in this leaflet. Their farms include more than 157 million acres.

Practically all these farmers say that their conservation farming program has increased yields and profits and has also checked erosion. Furthermore, about 166 thousand other farmers have applied to their soil conservation districts and are waiting for help in making conservation plans for their farms.

There were 2,013 conservation districts in the Nation on June 30, 1948. These districts cover more than a billion acres and include more than three-fourths of all the farms and ranches in the country. If you don't live in a soil conservation district and think you would like to obtain the type of conservation planning service described in this leaflet, you can get information from the supervisors of a nearby district, your county agent, your State Soil Conservation Committee, or the nearest office of the Soil Conservation Service about how you and your neighbors may organize a district.

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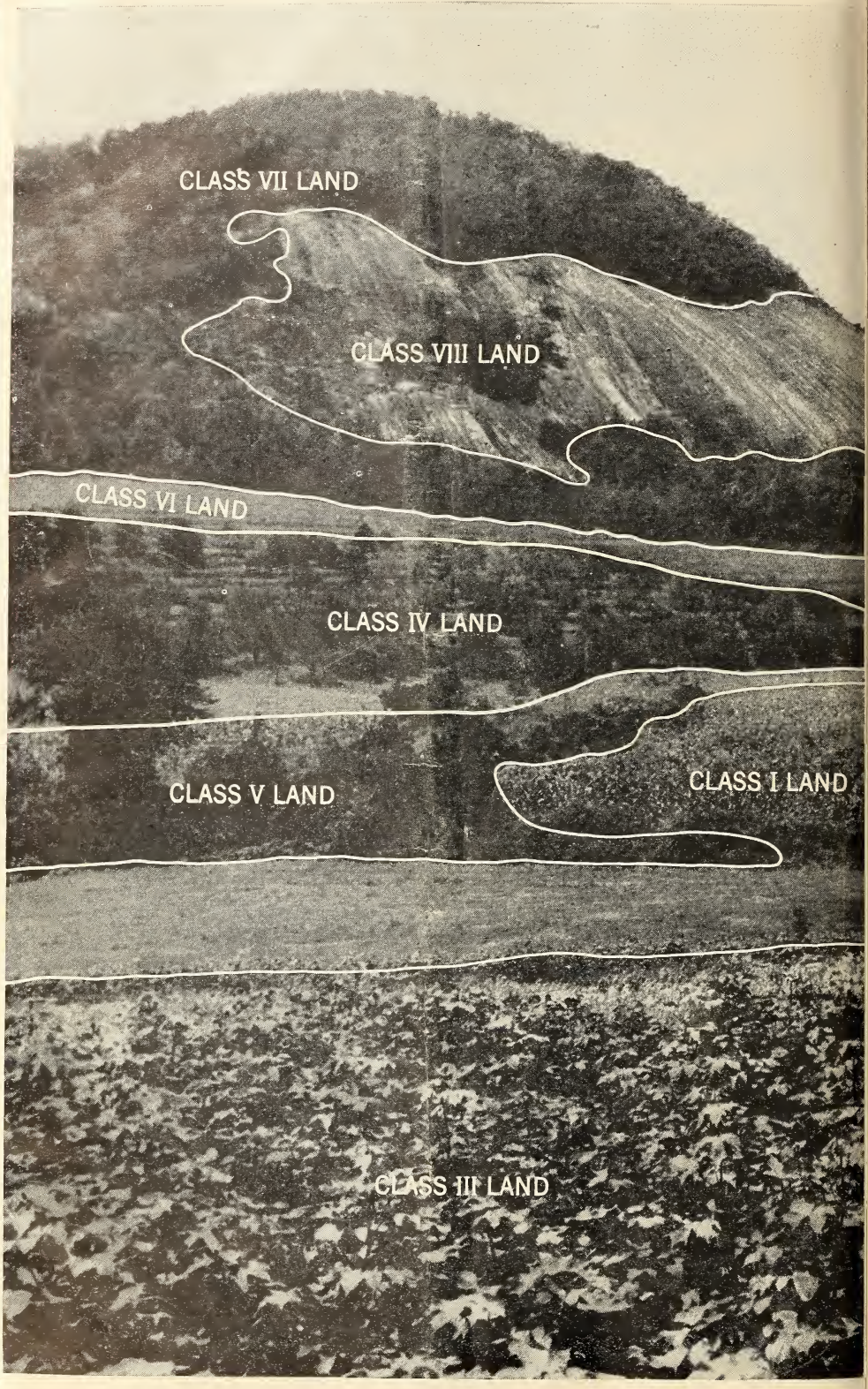
CLASS VII LAND
CLASS VIII LAND
CLASS VI LAND
CLASS IV LAND
CLASS V LAND
CLASS I LAND
CLASS III LAND